

THE NATURE AND TREATMENT OF HEAD- ACHES.*

By J. S. JEWELL, M. D.

(Continued from January number.)

THE management of true migraine, or the pure vasomotor type of headaches, presents a number of difficulties. Hitherto but few disorders have proved to be more intractable. But in the last few years some advance has been made, especially in the direction of curative treatment. I may say to you, with a tolerable degree of assurance, that the majority of such cases may be considered as curable, that is, if not associated with some other form of serious disease, more particularly of the nervous system.

The treatment falls naturally under two heads, the palliative and the curative. The former is applicable only to the attack.

Usually, as already said, there are certain premonitory symptoms by which the patient learns to know that an attack is imminent. In the majority of cases nothing of importance is done until the headache sets in, and in many instances hopeless of relief, but little is done to alleviate the pain or shorten the seizure. The suggestions now to be made embrace what I have found as most useful in a reliance upon the experience of others and by my own independent observations.

*A lecture delivered in the Chicago Medical College.

In those cases in which the head is hot, in which there are signs of vascular dilatation and a tolerably firm pulse, rather large doses of the bromides of sodium or potassium (from twenty to forty grains at a dose to an adult), to be duly diluted with water, and to be repeated once or twice in three or four hours, have often resulted (if given early) in diminishing the force of the attack. This treatment, however, is only applicable to those cases in which there is not much nausea, and in which, as already said, there are distinct signs of vascular dilatation and increased heat about the head. If the pain is in part paroxysmal, as in neuralgia, something can be done toward alleviating the headache by giving, in connection with the bromide of sodium or of potassium, or of ammonium, moderate but decisive doses of the tincture of gelsemium, or the tincture of aconite, more especially the latter. Duquesnel's aconitia, which seems to possess peculiar properties in relation to trigeminal neuralgias (to which these headaches, in a measure, belong), is to be preferred. From the one hundred and fiftieth to the three hundredth of a grain may be given every half or one hour, until the effect of the drug is experienced.

But in cases in which there is a decided tendency to disturbance of the stomach and nausea, these measures will not be found so useful.

If the headache is not attended by perceptible elevation of temperature about the head, or by signs of vascular dilatation, one of the speediest ways to procure relief is to give, either by the mouth or by hypodermic injection, a preparation of morphia and atropia in which nineteen grains of morphia and one of atropia are rubbed with 180 grains of sugar of milk. The mixture should be very thoroughly made. Of this mixture, from one to two or three grains may be given by the mouth every hour, until two or three doses have been taken, if necessary, and in most instances the pain will be pretty well relieved.

If, however, on account of nausea, or for any other reason, the powder cannot be taken and retained, a mixture may be made which shall contain nineteen grains of morphia and one grain of atropia in one ounce of distilled water. A drop or two of some dilute acid may be added to aid in effecting thorough solution. The mixture should be filtered and a drop of strong carbolic acid added to prevent the development of microscopic germs in the mixture. Of this from one to four minims may be given subcutaneously, a dose every half hour, until two or three doses have been taken, by which time the pain and the nausea will be, in some measure, if not entirely, under control.

In giving this or any similar mixture hypodermically, great care should be taken to begin with very small doses, if the toleration of the patient toward the drugs is not well known to the physician.

Still other doses, at longer intervals, may be employed for the relief of pain. In some instances, after the pain is allayed and the nausea in some measure abated, it is found difficult for the patient to sleep. In such cases, from ten to thirty grains (according to the circumstances of the case) of hydrate of chloral in a tablespoonful of water may be introduced into the rectum by means of a small syringe, such as the ordinary aural syringe. As a rule, after the patient is under the influence of the opiate, so that the pain is relieved or abated, the chloral will induce a prolonged and comfortable sleep, at the end of which the attack will usually be found to have passed.

In those cases in which the head is not hot, and in which there are no signs of cranial congestion, and in which there is but little nausea, some reliable preparation of guarana, or of the citrate of caffein, or a cup of strong coffee drank when quite hot, will aid in relieving the pain. But of all the means I have employed to relieve the pain of these

headaches, I know of none to compare with the combination of morphia and atropia that has been mentioned, especially if used hypodermically. It may be employed moderately with advantage, even in those cases in which there are signs of congestion about the head with elevated temperature. But in such instances it is well to associate it with one of the bromides.

In some cases where the attacks are exceedingly severe, inhalations of chloroform, to a moderate degree, may be employed, until other remedies, less rapid in their action, may be brought to bear. So far as medicine is concerned, for the immediate relief of pain in migraine I have nothing further to observe that is worth mentioning to the exclusion of the palliatives just described.

Besides the medical treatment, it is necessary to seclude the patient, as far as may be, from all excitement, whether sensorial or emotional. The room should be darkened. All noise should cease, and, as far as possible, nothing said or done by either the patient or attendants that can excite or disturb the nervous system.

There are some cases, however, in which some relief is apparently obtained by moving about. Such cases, however, are rare, especially if placed under the action of the remedies described.

Relief is sometimes obtained by making the patient quite warm, especially in the application of warmth to the lower extremities, and by making warm, as a rule, rather than cold applications to the head. Occasionally relief is obtained by drawing a band tightly about the head.

An Esmarch bandage may be sometimes employed for this purpose with benefit,—drawn around across the forehead, occiput, etc., and permitted to remain as long as it is comfortable to the patient. In some instances in which there is a strong tendency to nausea, a large draught of

quite hot water will afford relief, especially if it leads to vomiting.

Such, in my experience, are the more important palliative means to be employed just before or during the attack. I should not omit to state that in some cases attacks of this form of headache, especially of the congestive type or kind, are much benefited by the passage, very cautiously, of a galvanic current through broad moist electrodes, from the forehead to the nape of the neck, for a few minutes, and through the cervical sympathetics to the feet. It should never be passed in the opposite direction, that is, through the head, in this class of cases.

Next as regards the curative treatment.

In the first place, it is necessary for physician and patient to understand that cure of a case of migraine is almost as difficult as that of a moderate epilepsy. It can seldom be accomplished in less than from six months to two years of faithful attention to all reasonable details of treatment. In some cases a cure is impossible, where the general health of the nervous system is hopelessly broken.

It is better not to commence treatment at all until the patient is brought thoughtfully to understand that a less term than one year of faithful trial of the plan decided upon is likely to be useless. This is the first thing to be understood. It is necessary, in the next place, to consider most rigidly the question of diet. It should be nutritious, but of the simplest kind. All marginal or side dishes, as a rule, should be cut off, and under no circumstances should anything be taken which has been proved, in the candid experience of the patient, to disagree with the stomach. Care should also be taken not to overload the stomach. In these cases it is absolutely necessary to avoid the use of strong coffee or strong tea. If these drinks are taken as beverages the infusions should be weak. If the patient will not

agree to follow advice in this respect I decline promptly to undertake the case. As a rule, all alcoholic stimulants should be laid aside. A little claret, however, during or after the principal meals, is sometimes attended with apparent benefit, or at least leads to no apparent harm. It is necessary, in the next place, as far as possible, rigidly to avoid serious fatigue, whether bodily or mental, to avoid all undue emotional or other excitement, that the nervous system may not be exhausted either by voluntary action or by excitement. This is a point of great importance. A large amount of sleep should be secured, if necessary, by the use of artificial means. It is necessary also that the surface of the body shall be protected thoroughly by a suitable dress, so that sudden chilling shall not take place, so as to avoid, in this way, unfavorable vascular fluctuations.

Great care should be taken to secure thorough movements from the bowels. Under no circumstances should constipation be permitted. At this point, I think it necessary to drop a word of caution. It frequently happens that the patient, upon inquiry, will inform the physician that regular movements take place daily; but in a surprisingly large number of cases strict inquiry will reveal the fact that either at one or both ends of the colon faecal accumulations are habitual, notwithstanding some portion of the same is voided daily. These faecal accumulations are oftentimes the cause of intestinal irritation, which, in its turn, may bring on an attack of headache. I have seen many such cases. It is necessary, finally, to prevent this class of patients from fixed use of the eyes, as in much reading, or as in the work of a seamstress, or in any other occupation which implies minute and continuous exercise of vision.

I would recommend, especially before retiring, protracted hot mustard foot baths, if the feet are cold and, in a

measure bloodless, as they so often are in this class of cases. Every pains should be taken to keep them warm. A light, cool sponge bath, of mornings, followed by thorough frictions, when the bath is well borne, if persisted in daily undoubtedly leads to good results in strengthening the nervous system.

Such are the more important hygienic measures to be faithfully and minutely observed in the treatment of this class of cases. Without attention to them the best directed course of purely medical treatment, as a rule, will fail.

I now come to the question of curative treatment.

If, as so frequently proves to be true, the patient has a light gastric catarrh and more or less imperfect digestion, I would recommend the use of some such prescription as the following:

R

Sodium bromidi,	3 vi
Acid hydrobromic,	{ 3 iii
Fothergill solution,	
Bismuth subnit.	3 v
Pepsin sacch.	3 vi
Tr. digitalis,	3 iii
Infus. columbae,	3 vi m

Sig. Keep in a cool place. Shake well. Take a large
teaspoonful, in water, after meals.

The action of the bromide, given as it is in small doses, seems to be sufficient to diminish reflex excitability, more particularly of the vaso-motor and cardiac nervous systems, to improve the condition of the mucous membrane of the stomach, and to aid digestion. Of course, the use of such a prescription is recommended only in that rather large class of cases in which there is gastric or gastro-duodenal disorder. Under the use of this prescription patients are less excitable, the circulation of the blood about the head is less fluctuating and tricky, sleep upon the whole is better, and, in general, comfort is promoted.

Besides this it has been my habit the last few years to advise (according to the plan pursued by Dr. E. C. Seguin and others) rather large doses of a reliable extract of cannabis Indica. This may be either fluid or solid, but if a reliable solid extract can be obtained it is the most convenient. To an adult it may be given in doses of one-third to one-half a grain three times a day; once in the middle of the forenoon, and once in the middle of the afternoon, and, as a rule, on retiring. It may be given alone or in association with other remedies in a pill. From one-third of a grain the advance may be made to one-half or even three-fourths of a grain, until the point is reached of easy toleration of the drug. But the advance of the dose of the drug should be continued until indubitable signs are had of a beginning of its intoxicating effects upon the nervous system. Whenever this limit is reached, one-fourth to one-third the dose necessary to produce immediate symptoms may be taken off, and at this point the dose fixed, just below the point, as already said, of easy toleration of the drug. The remedy should be given without fail two or three times a day; if need be, for six months to one year. When from three to six months shall have passed without a severe attack, the dose may be given twice daily instead of three times, the quantity may be diminished and its use continued, say three months longer, at the end of which time it may be discontinued. If at the end of the three to six months, all reasonable care being taken meanwhile to avoid an attack, if, I say, at the end of this time the headaches do not return, we may feel tolerably certain that a cure has been effected. Of course this does not insure that the patient will never again have an attack of headache, but the series of attacks is broken, and, with care, will never return.

I am in the habit, however, of associating other reme-

dies in various cases with the cannabis Indica. Where there is a great tendency to violent fluctuations tending toward congestions about the head, I have found benefit to accrue from the use of from one to two grains of a reliable extract of ergot given with each dose of the cannabis Indica. In other cases I have associated with it tonics, as they appear to be needed, such as nux vomica, quinine, or iron. In some cases I have found it beneficial to combine with the hasheesh moderate doses of podophyllin, or of aloes, or of belladonna, to fulfil some special indications, but especially to remove constipation.

But in order to be successful, the treatment must be faithfully pursued. Other plans have been suggested, other remedies proposed and tried, but without that measure of success which, in my own hands, the plans of treatment just described have yielded.

As regards the other class of headaches belonging to the vaso-motor class, which depend less upon fixed disease of the nervous system than upon the violence of action of their occasional exciting causes, I shall find it necessary to say but little.

Of course, the first step in the treatment of such cases consists in the removal of the cause, whatever that may be. If the stomach is filled with undigested and indigestible food, it should be removed by the operation of an emetic. If the headache depends upon undue acidity of the stomach the acid should be neutralized. If it depends upon constipation this should be relieved by appropriate means. If it depends upon the loss of sleep and consequent brain wear and tear, rest should be had. If it depends upon excessive brain work or upon great and prolonged emotional excitement, if possible, these conditions should be removed. But whatever the cause, let it be removed. Nevertheless, it is necessary to do something for the relief of the headache.

It is perhaps sufficient for me to say to you that the same measures used to relieve the pain in cases of true migraine will be, according to the situation of the case, useful in relieving pain in these occasional vaso-motor headaches. Rest, abstinence from food, the avoidance of labor or excitement, and the use of some one of the means already described as useful in migraine, constitute all that can be profitably laid before you at this time.

I should not omit to mention that there are cases in which a true migraine is mixed up with a headache depending upon painful organic disease, such, for example, as that already described as arising from affections of the dura. In such cases I have found it necessary to associate small doses of opium or morphia, especially the watery extract of opium, or at times, instead of the opium, codeia, with the cannabis Indica in order to allay persistent pain. Such cases require a combination of plans of treatment, and their management, after what has been said, should be left to your own good sense when you meet with them in the rounds of clinical experience.